

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P211779

Luminaire Tested: **LSR4B20D010BZ EC4B10208050 4LBSMW1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211779  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LSR4B20D010BZ EC4B10208050 4LBSMW1  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH MATTE WHITE TRIM  
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W  
DL3-21.8 6W DLE-22.46W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2147.6 lumens  
Efficiency: N/A  
Efficacy: 103.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.34  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

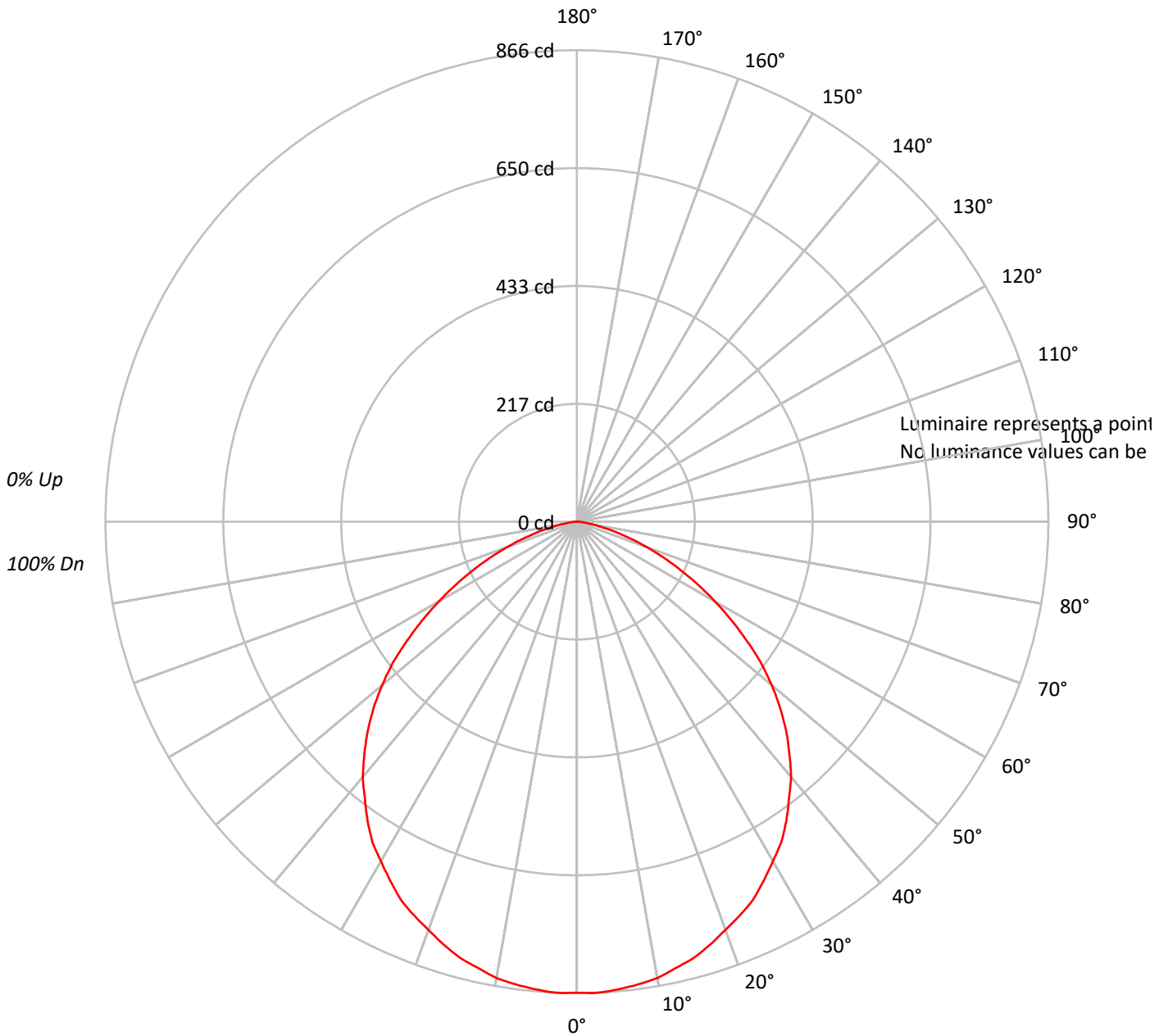
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86																			
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74																			
3	93	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	66	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47																			
6	73	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42																			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	43	39	37																			
8	63	50	41	36	61	49	41	36	48	41	35	46	40	35	45	39	35	33																			
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30																			
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27																			

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.0	3.8
10°-20°	233.7	10.9
20°-30°	352.0	16.4
30°-40°	418.8	19.5
40°-50°	418.0	19.5
50°-60°	340.0	15.8
60°-70°	209.2	9.7
70°-80°	81.1	3.8
80°-90°	13.0	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	667.6	31.1
0°-40°	1086.4	50.6
0°-60°	1844.4	85.9
0°-90°	2147.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2147.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	865	
5°	863	82
15°	830	234
25°	766	352
35°	671	419
45°	543	418
55°	380	340
65°	210	209
75°	74	81
85°	10	13
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	865.3
2.5°	866.5
5°	862.7
7.5°	857.6
10°	851.3
12.5°	839.8
15°	829.6
17.5°	814.4
20°	797.8
22.5°	782.6
25°	766.0
27.5°	743.1
30°	720.2
32.5°	698.6
35°	670.6
37.5°	640.0
40°	612.0
42.5°	577.7
45°	543.3
47.5°	506.4
50°	467.0
52.5°	426.3
55°	380.5
57.5°	335.9
60°	292.7
62.5°	250.7
65°	210.0
67.5°	171.8
70°	136.2
72.5°	103.1
75°	73.8
77.5°	48.4
80°	29.3
82.5°	17.8
85°	10.2
87.5°	5.1
90°	0.0



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— 0°-180°







(END OF REPORT)